

Passenger rail performance

1 January to 31 March 2024

30 May 2024

Background:

This quarterly statistical release contains information on passenger rail performance measures of punctuality and reliability for Great Britain.

These include: **On Time** at every recorded station stop, **train delays**, **PPM**, **Cancellations** and **Severely disrupted days**.

It also contains more detailed information by train operator.

Numbers presented in this release are rounded

Source: Network Rail

Latest quarter: 1 January to 31 March 2024

Contents:

Background – p2
Train punctuality – p7
Train reliability – p12
Train operator analysis – p17
Annexes – p27

Responsible statistician:

M. Lunn

Public enquiries:

rail.stats@orr.gov.uk

Media enquiries:

07856 279808

Next publication:

12 September 2024

Passenger rail performance in the latest quarter (1 January to 31 March 2024) was better than the same quarter one year ago for the main measures of punctuality and reliability. In the latest quarter, there were **1.8 million trains planned** in Great Britain. This was up 6% compared with the same quarter one year ago.

Table 1 Performance was better than one year ago

Measure	Jan to Mar 2024	Compared with Jan to Mar 2023 (one year ago)	
On Time	68.3%	↑	0.1pp
PPM	86.8%	↑	0.1pp
Cancellations score	3.3%	↓	0.1pp

For the **On Time** punctuality measure, the percentage of recorded station stops arrived at 'on time' in Great Britain was **68.3%** in the latest quarter. Using **PPM**, **86.8%** of trains were punctual at their final destination in the latest quarter.

The **Cancellations score** in the latest quarter was **3.3%**. The cancellation measure is a weighted score which counts full cancellations as one and part cancellations as half. This industry measure is an indicator of disruption against the timetable operating on the day. The timetable is finalised at 22:00 the previous evening, and trains removed from the timetable before then will not be included. For example, "P*-coded" pre-cancelled trains are not included, and on days with strike action the Cancellations score only reflects trains cancelled from the reduced timetable.

There were **five severely disrupted days**, when the daily Cancellations score was 5% or higher, in the latest quarter. This was a decrease of three days on the same quarter in the previous year.

Information about annual performance in the latest year (1 April 2023 to 31 March 2024) can also be found throughout this release.

All data tables, a quality and methodology report and an interactive dashboard associated with this release are published on the [Passenger rail performance page](#) of the data portal.

1. Background

From April 2020 there were reductions in both trains planned and passengers on the railway network due to the coronavirus (COVID-19) pandemic. This led to improvements in punctuality and reliability compared with before the pandemic. However, as passengers returned and more trains ran, both reliability and punctuality deteriorated. Whilst the main focus of this publication is the presentation of the latest quarterly statistics compared with the same quarter of the previous year (1 January to 31 March 2023), there are also a number of comparisons to four years ago (April 2019 to March 2020, before the pandemic) to monitor how the recovery of the railway network impacts train performance. This release also includes annual statistics for the financial year April 2023 to March 2024. Again, most of the focus for comparison is to the previous year (April 2022 to March 2023), however a number of comparisons to four years ago (April 2019 to March 2020) are included.

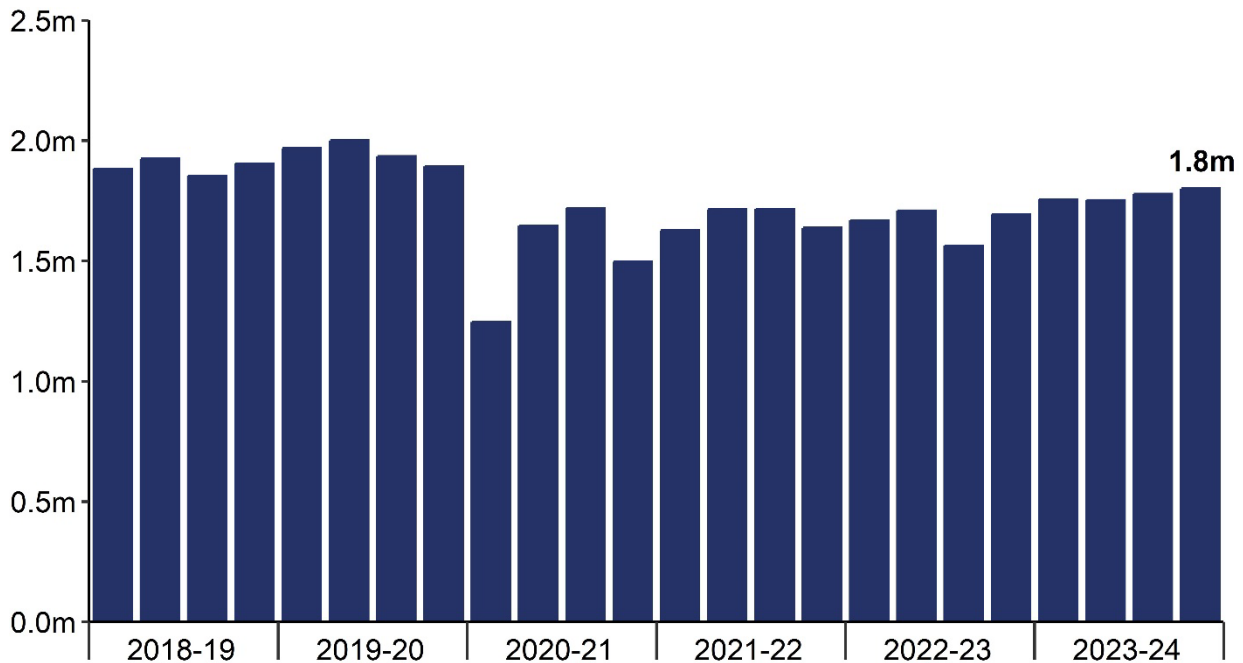
Trains planned

A train planned in this statistical release refers to a train service confirmed to run by the operator and Network Rail at 22:00 on the previous evening. Planned train services removed from railway systems before this cut-off time are not included.

In the **latest quarter**, there were **1.8 million** trains planned in Great Britain. The latest quarter had 108,000 more planned trains (up 6%) compared with the same quarter the previous year (1 January to 31 March 2023). The latest quarter had 92,000 fewer trains planned (down 5%) compared with the same quarter four years ago (1 January to 31 March 2020) that had 1.9 million trains planned.

Figure 1.1 Trains planned increased compared with the same quarter in the previous year

Trains planned (millions), Great Britain, quarterly data, April 2018 to March 2024 (Table 3123)



In the **latest quarter**, six strike action days took place (30 and 31 January, 2, 3, and 5 February, and 1 March). All of these were linked to action by the ASLEF union. In some previous quarters, ASLEF industrial action had involved all members on the same day, however these six days saw different operators impacted on each day. Further details are provided in Table 1.1 below.

Table 1.1 Reduction of trains planned on strike days, Great Britain, January to March 2024

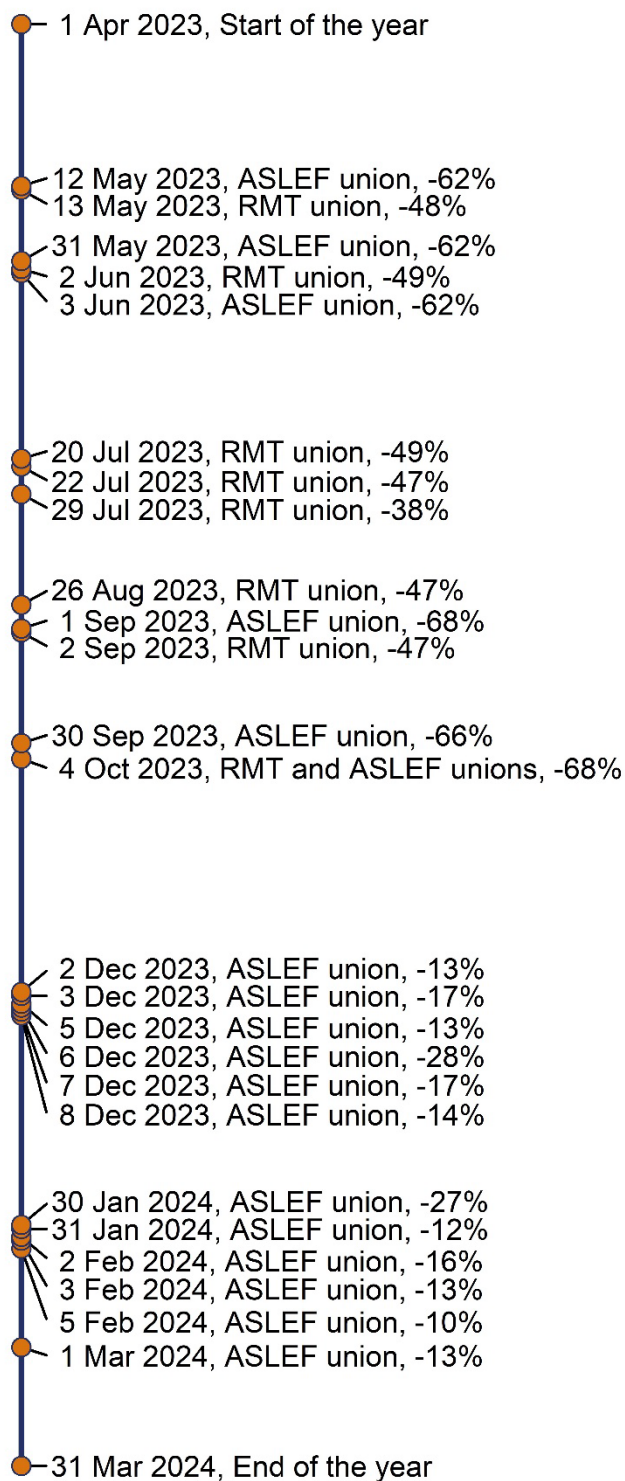
The estimated reductions were calculated by comparing the number of trains planned on the day with the same day the week before. In cases when the same day the week before also had a significant reduction in trains planned, the same day the week after was used.

Date	Event	Estimated daily reduction of trains planned
30 January 2024	Strike action by the ASLEF union affecting Govia Thameslink Railway, South Western Railway and Southeastern services	-27%
31 January 2024	Strike action by the ASLEF union affecting Northern Trains and TransPennine Express services	-12%
2 February 2024	Strike action by the ASLEF union affecting c2c, Greater Anglia and LNER services	-16%
3 February 2024	Strike action by the ASLEF union affecting Avanti West Coast, East Midlands Railway, and West Midlands Railway services.	-13%
5 February 2024	Strike action by the ASLEF union affecting Chiltern Railway, CrossCountry, Great Western Railway and Heathrow Express services	-10%
1 March 2024	Strike action by the ASLEF union affecting Northern Trains and LNER services	-13%

There have been 25 days of strike action by the railway unions in the **latest year** (1 April 2023 to 31 March 2024). See Figure 1.2 below for a timeline of these dates.

Figure 1.2 There have been 25 days of strike action in the latest year

Days of national strike action with associated unions and estimated daily reductions in trains planned, Great Britain, 1 April 2023 to 31 March 2024

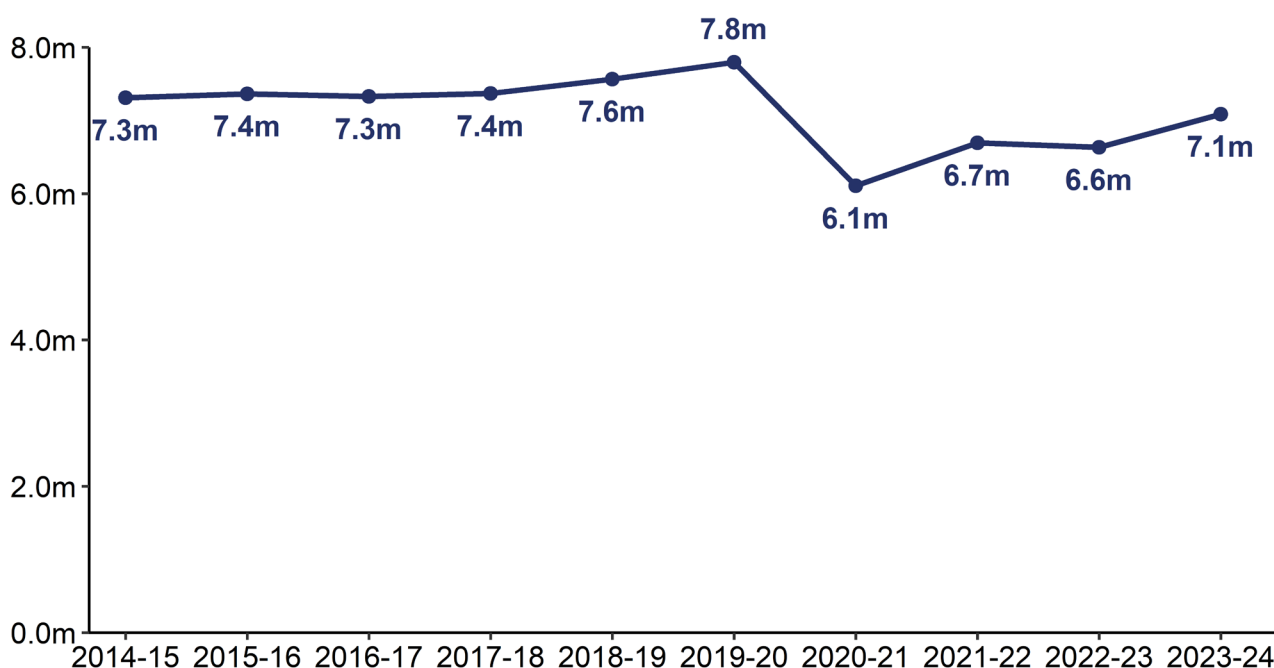


An estimated 188,000 trains were planned not to run as a result of the strike action taken in the latest year (1 April 2023 to 31 March 2024). Had these trains ran as normal, this would have accounted for 3% of total trains planned. The estimate of 188,000 trains was calculated by taking the difference of the actual trains planned on each strike day and the number of trains planned the previous week. For example, to calculate the impact of strike action on the number of trains planned on 12 May 2023, the difference in trains planned was taken between this day and 5 May 2023. Where strike action also took place the week before, the same day the following week is instead used as a comparison day.

In the **latest year** (1 April 2023 to 31 March 2024) there were **7.1 million** trains planned in Great Britain. This is an increase of 7% on the previous year ending March 2023, but down 9% on the year ending March 2020. The increase in the number of planned trains reflects a reduction in the amount of strike action taken by railway unions and changes to timetables, particularly the Elizabeth line which entered full service in May 2023.

Figure 1.3 More trains were planned in the latest year than in the three previous years

Trains planned (millions), Great Britain, annual data, April 2014 to March 2024 (Table 3123)



Further trains planned data are available in Table 3123 (quarterly) and Table 3124 (periodic). Periodic (4-weekly) operational data in Table 3124 are made available on the ORR data portal as soon as the data are loaded and validated into our systems. At the date of this release's publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

2. Train punctuality

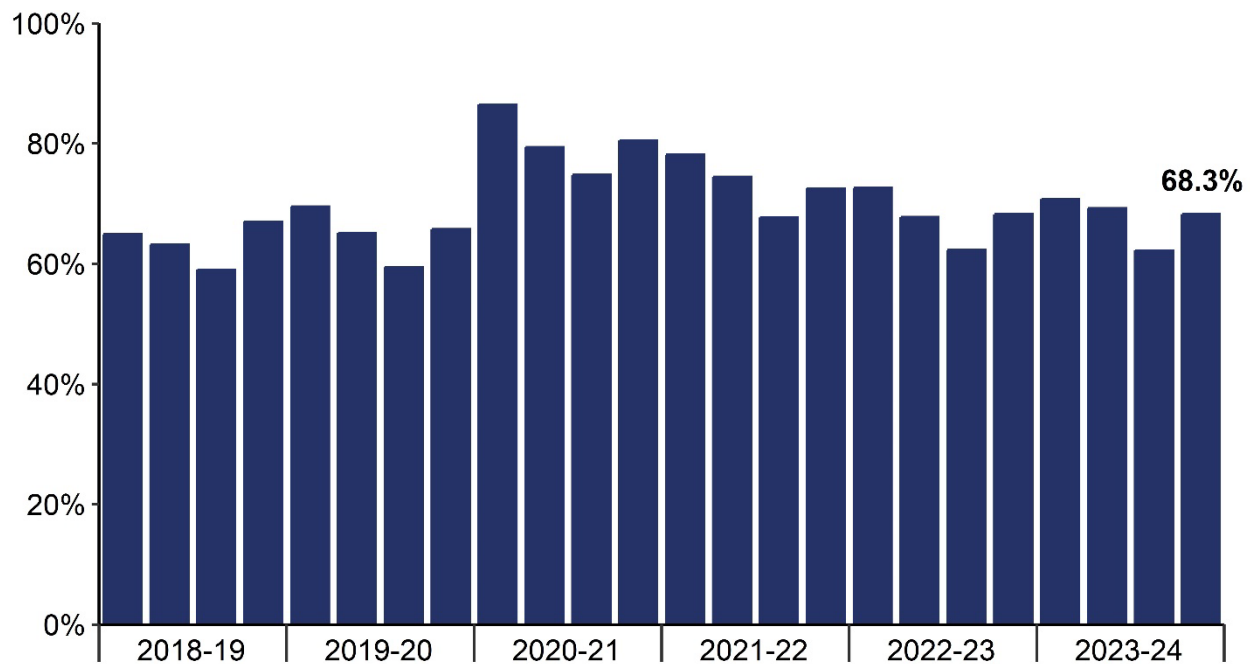
Punctuality at each recorded station stop

On Time is the percentage of recorded station stops that were arrived at early or less than one minute after the scheduled time.

In the **latest quarter**, **68.3%** of recorded station stops in Great Britain (13.6 million out of 19.9 million) were arrived at On Time. This was 0.1 percentage points (pp) higher (i.e. better) than the same quarter the previous year and 2.5pp higher than the same quarter four years ago.

Figure 2.1 On Time percentages were slightly above levels in the same quarter in the previous year

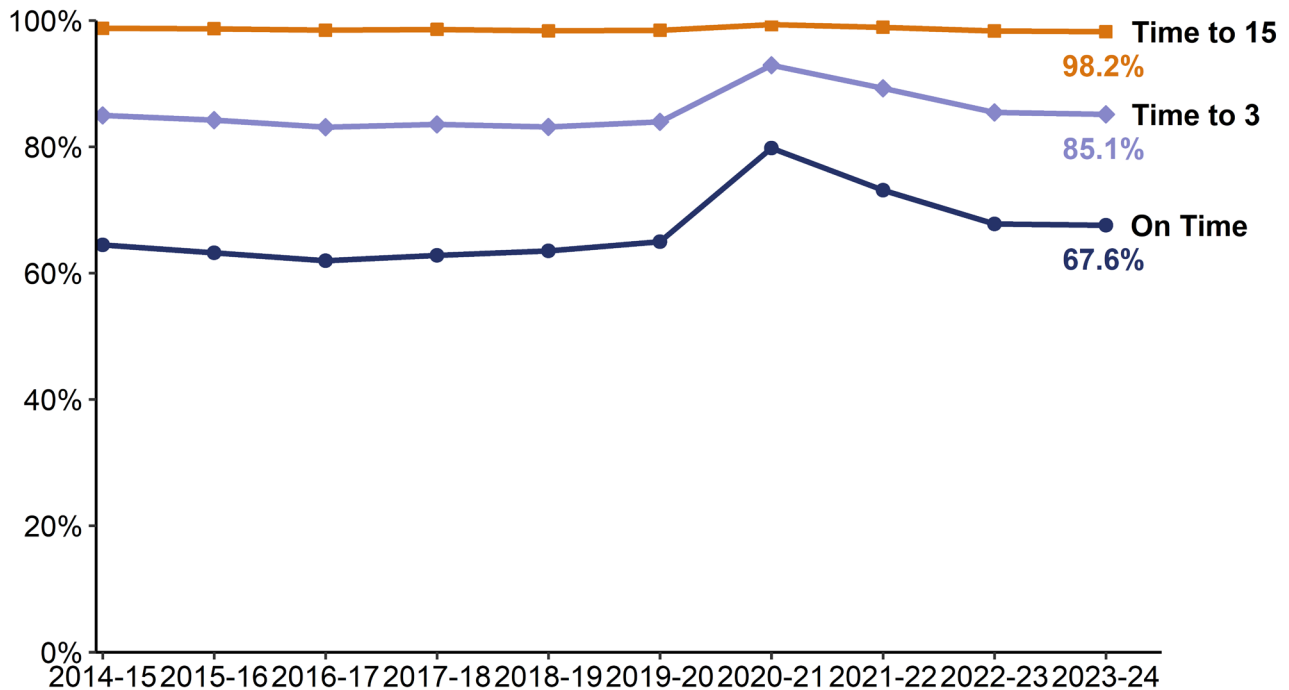
On Time, Great Britain, quarterly data, April 2018 to March 2024 (Table 3133)



In the **latest year** (1 April 2023 to 31 March 2024), **67.6%** of recorded station stops in Great Britain were arrived at within a minute of the scheduled arrival time (On Time), **85.1%** arrived within 3 minutes (Time to 3), and **98.2%** arrived within 15 minutes (Time to 15). All three measures were slightly worse than in the previous year, with On Time, Time to 3, and Time to 15 being down 0.2pp, 0.3pp, and 0.1pp respectively. Compared with four years ago (before the pandemic), On Time and Time to 3 improved, increasing by 2.6pp and 1.2pp respectively, while Time to 15 deteriorated slightly, decreasing by 0.2pp.

Figure 2.2 Annual On Time, Time to 3 and Time to 15 percentages fell slightly in the latest year

On Time, Time to 3, and Time to 15 percentages, annual data, April 2014 to March 2024 (Table 3133)



Further train punctuality data are available in Table 3133 (quarterly) and Table 3138 (periodic). These include the percentage of recorded station stops arrived at within 3 minutes (Time to 3) and within 15 minutes (Time to 15) after the scheduled arrival time. Periodic (4-weekly) operational data in Table 3138 are made available on the ORR data portal as soon as the data are loaded and validated into our systems. At the date of this release’s publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

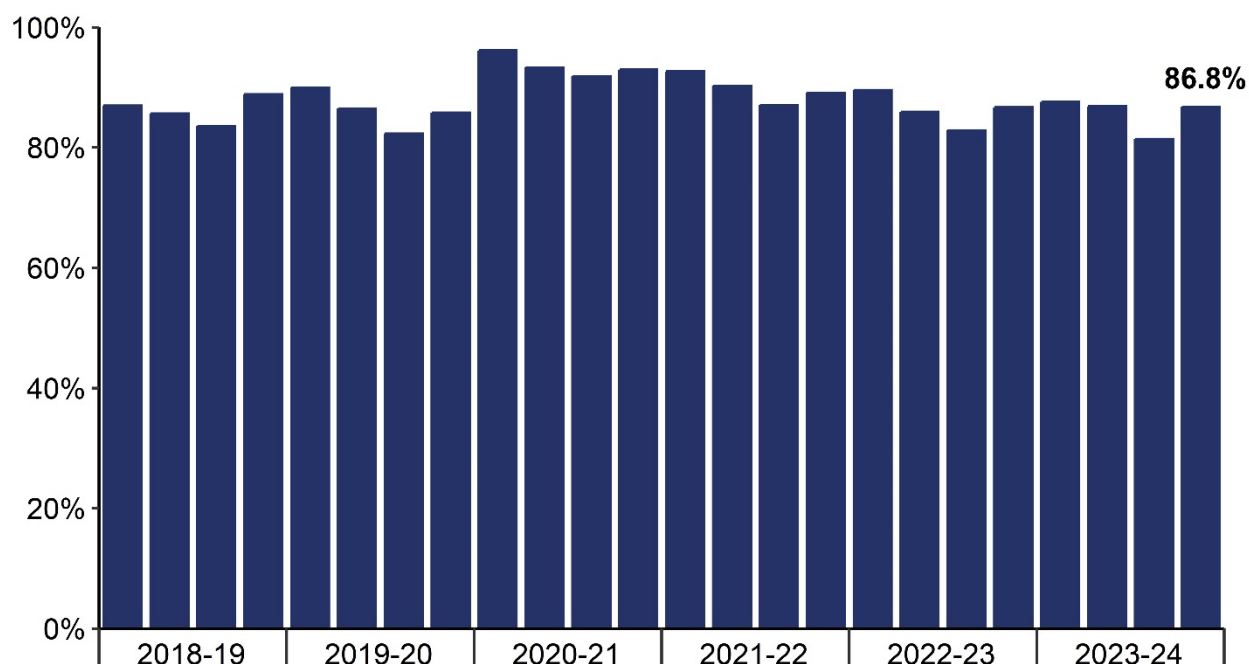
Public Performance Measure (PPM)

The **Public Performance Measure (PPM)** is the percentage of trains arriving at their final destinations within either 5 or 10 minutes of the scheduled arrival time depending on the type of train operator providing the service.

In the **latest quarter**, PPM for Great Britain was **86.8%**. This was 0.1pp higher (i.e. better) than the same quarter the previous year, and 1.0pp higher on the same quarter four years ago (January to March 2020).

Figure 2.3 PPM was slightly higher than in the same quarter in the previous year

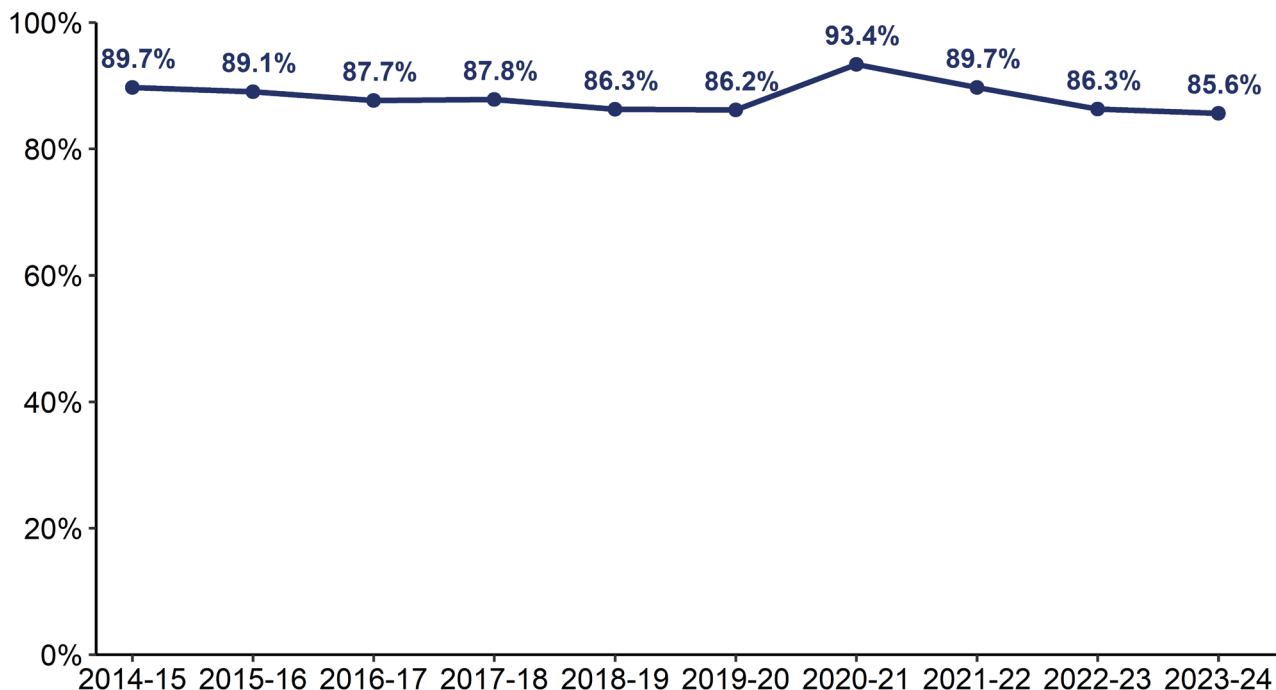
PPM, Great Britain, quarterly data, April 2018 to March 2024 (Table 3113)



In the **latest year** (1 April 2023 to 31 March 2024), PPM was **85.6%** (Figure 2.4). This was down 0.7pp on the previous year ending March 2023 and down 0.6pp on the year ending March 2020.

Figure 2.4 Annual PPM has decreased slightly in the latest year

PPM, Great Britain, annual data, April 2014 to March 2024 (Table 3113)



Further PPM train punctuality data are available in Table 3113 (quarterly) and Table 3114 (periodic). Periodic (4-weekly) operational data in Table 3114 are made available on the ORR data portal as soon as the data are loaded and validated into our systems. At the date of this release's publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

Other punctuality measures

Delay minutes

Delay minutes measure the time lost between consecutive timing points on the rail network.

In the **latest quarter**, national (GB) passenger train delay minutes attributed to Network Rail increased by 10% compared with the same quarter the previous year. Delay minutes attributed to operators increased by 3% compared with a year earlier.

For detailed information on Network Rail and operator performance in the latest quarter, please see our [interactive performance dashboard](#) on the data portal. Periodic (4-weekly) operational data in Table 3184 are made available on the ORR data portal as soon as the data are loaded and validated into our systems. At the date of this release's publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

Consistent Region Measure – (Passenger) Performance

The **Consistent Region Measure – (Passenger) Performance** (CRM-P) measures passenger train delay attributed to Network Rail from incidents occurring in each [Network Rail region](#), per 100 train kilometres.

In Control Period 6 (April 2019 to March 2024) CRM-P was one of the key measures used by ORR for routine [monitoring and assessment of Network Rail's passenger rail performance](#). ORR monitored delivery against annual CRM-P targets and regulatory floors set for each of the five Network Rail regions.

Periodic (4-weekly) CRM-P data can be found on the ORR data portal (Table 3174). At the date of this release's publication (30 May 2024), the latest periodic data available is up to 31 March 2024.

Average Passenger Lateness

Average Passenger Lateness (APL) measures the average lateness of a passenger as they alight from their train.

Periodic (4-weekly) operational data in Table 3144 are made available on the ORR data portal as soon as the data are loaded and validated into our systems. At the date of this release's publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

3. Train reliability

Cancellations

In the **latest quarter**, of the 1.8 million trains planned, 41,800 were full cancellations and 36,100 were part cancellations.

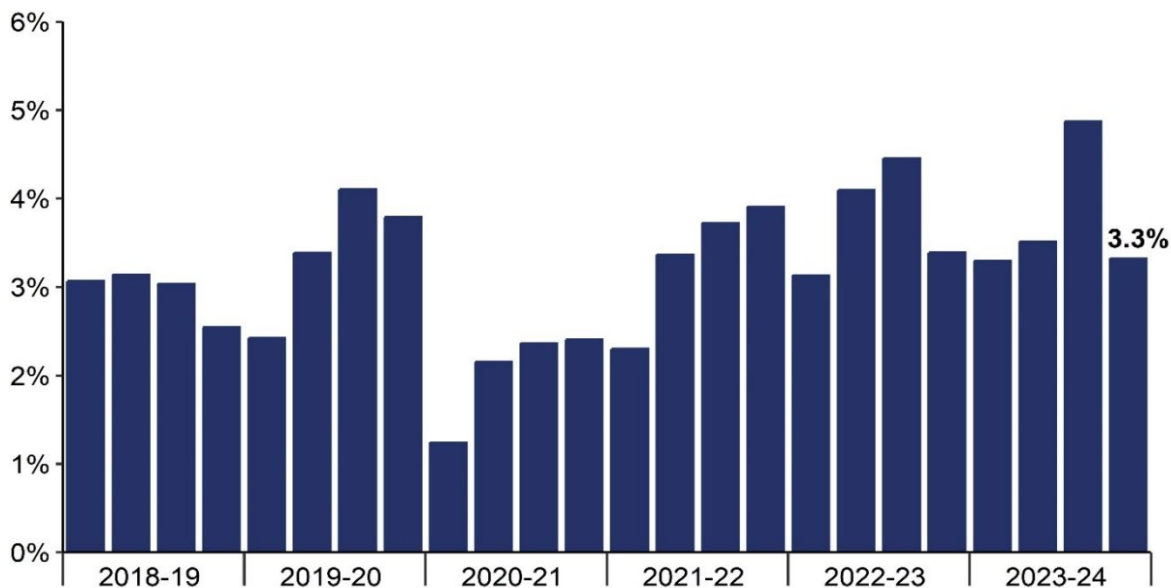
The **Cancellations score** is the percentage of trains planned that were cancelled, whereby full cancellations are counted as one and part cancellations as half. This industry measure is an indicator of disruption against the timetable operating on the day. The timetable is finalised at 22:00 the previous evening, and trains removed from the timetable before then will not be included. Strike action by the railway unions took place on six days in the latest quarter. In response a reduced timetable was put in place on the strike days and on some of the days after. The Cancellations score only takes account of trains cancelled from the planned reduced service.

Some operators have reported they use the practice of “**P*-coding**” for resource availability shortage pre-cancellations, i.e. changes to train services caused by non-availability of staff or rolling stock that are included in a revised timetable, and therefore may not be appearing in operators’ Cancellations scores. Operators who use “P*-coding” may therefore have a lower Cancellations score reported in this release than that which a passenger may experience. ORR has collected and [published](#) the number of trains that each operator removed from the timetable due to resource availability shortages and an ‘adjusted’ Cancellations score for each period from 8 January 2023 (rail period 11). For more information about “P-coding” see Section 4 below (Train operator analysis – Reliability).

In the **latest quarter**, the Cancellations score was **3.3%** which was 0.1pp lower (i.e. better) than the same quarter the previous year, and 0.9pp higher (i.e. worse) than the same quarter four years ago.

Figure 3.1 The Cancellations score improved in the latest quarter

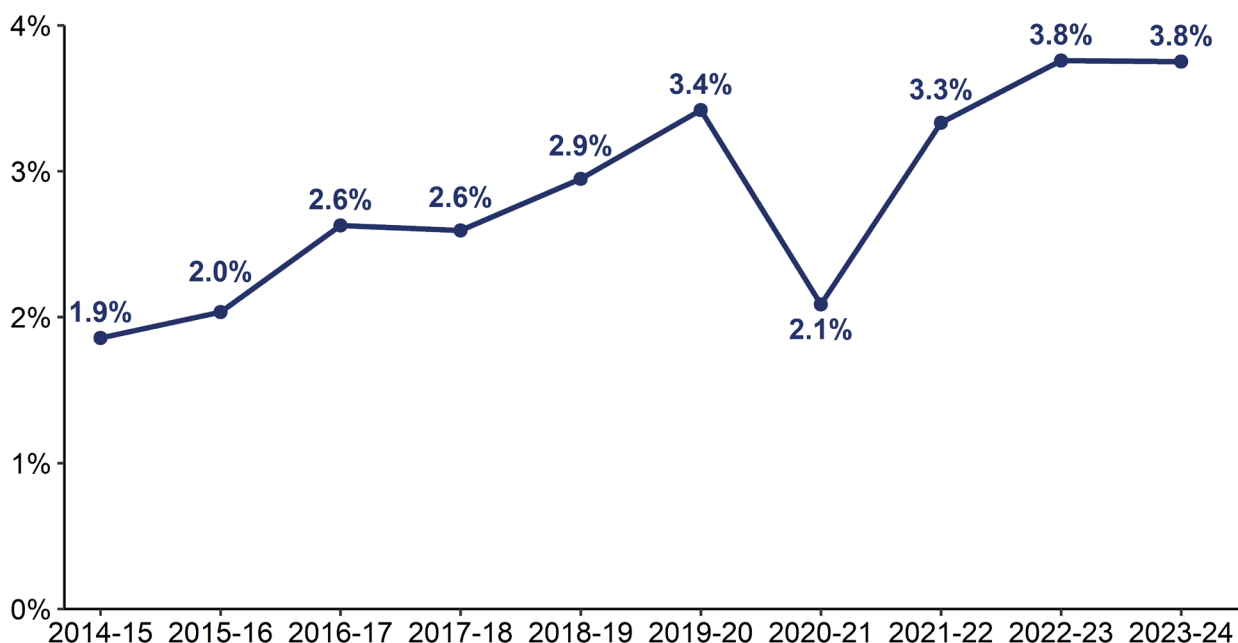
Cancellations score, Great Britain, quarterly data, April 2018 to March 2024 (Table 3123)



The Cancellations score for the **latest year** (1 April 2023 to 31 March 2024) was **3.8%**. This was the same as previous year ending March 2023, but has increased by 0.3pp on the year ending March 2020.

Figure 3.2 Annual Cancellations scores remain above pre-pandemic levels

Cancellations score, Great Britain, annual data, April 2014 to March 2024 (Table 3123)



Responsibility for cancellations

In the **latest quarter**, of all attributed cancellations, operators were attributed with responsibility for 45% of cancellations, with another 4% attributed to external incidents such as a passenger falling ill on a train. Infrastructure owners were attributed with responsibility for 29% of cancellations for infrastructure and network management issues, with another 21% attributed to external incidents such as severe weather or trespassing. External incidents are attributed to the party considered best placed to mitigate their effects.

Figure 3.3 Just under half of cancellations were attributed to operators in the latest quarter

Proportion of cancellations by responsibility category, Great Britain, quarterly data, April 2018 to March 2024 (Table 3123)

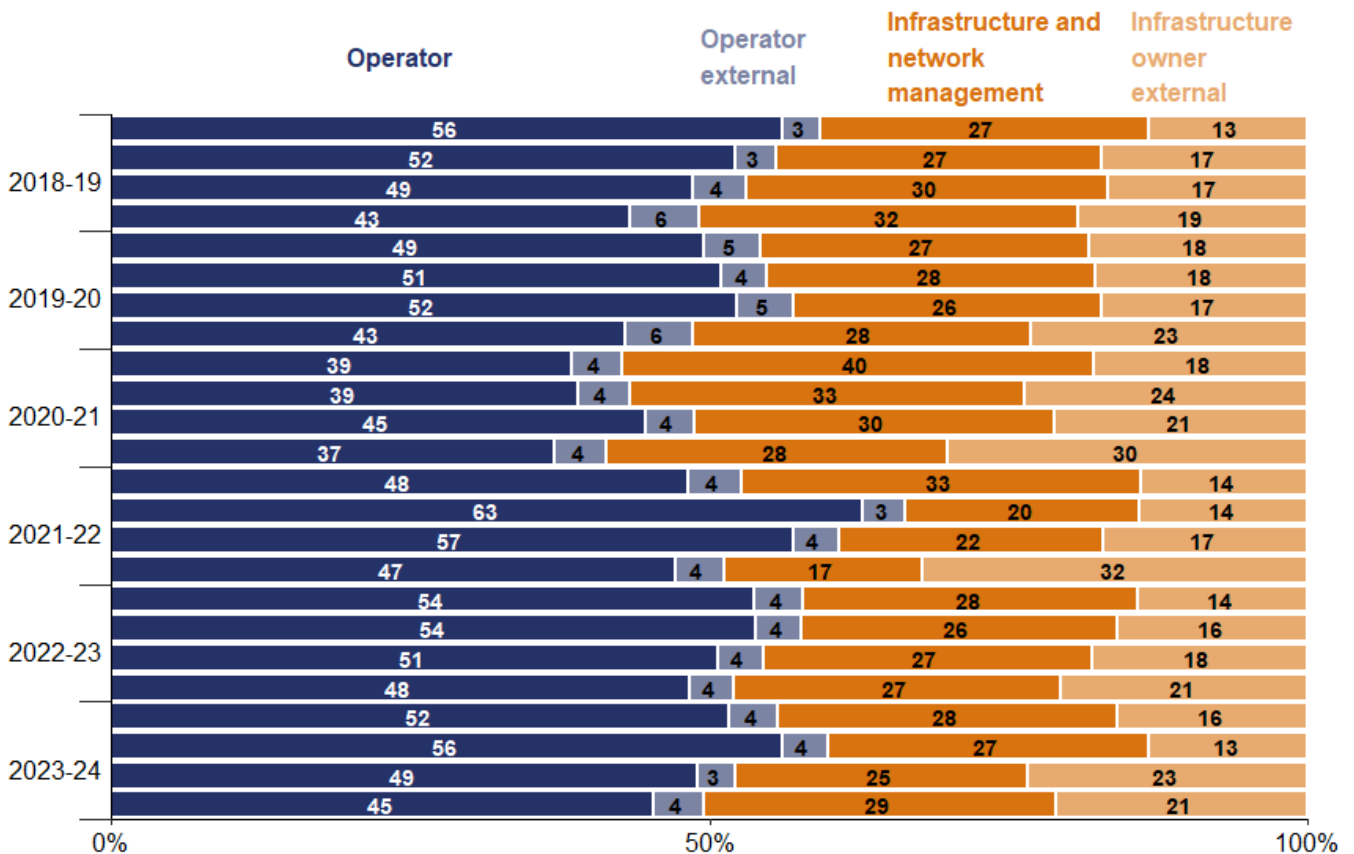
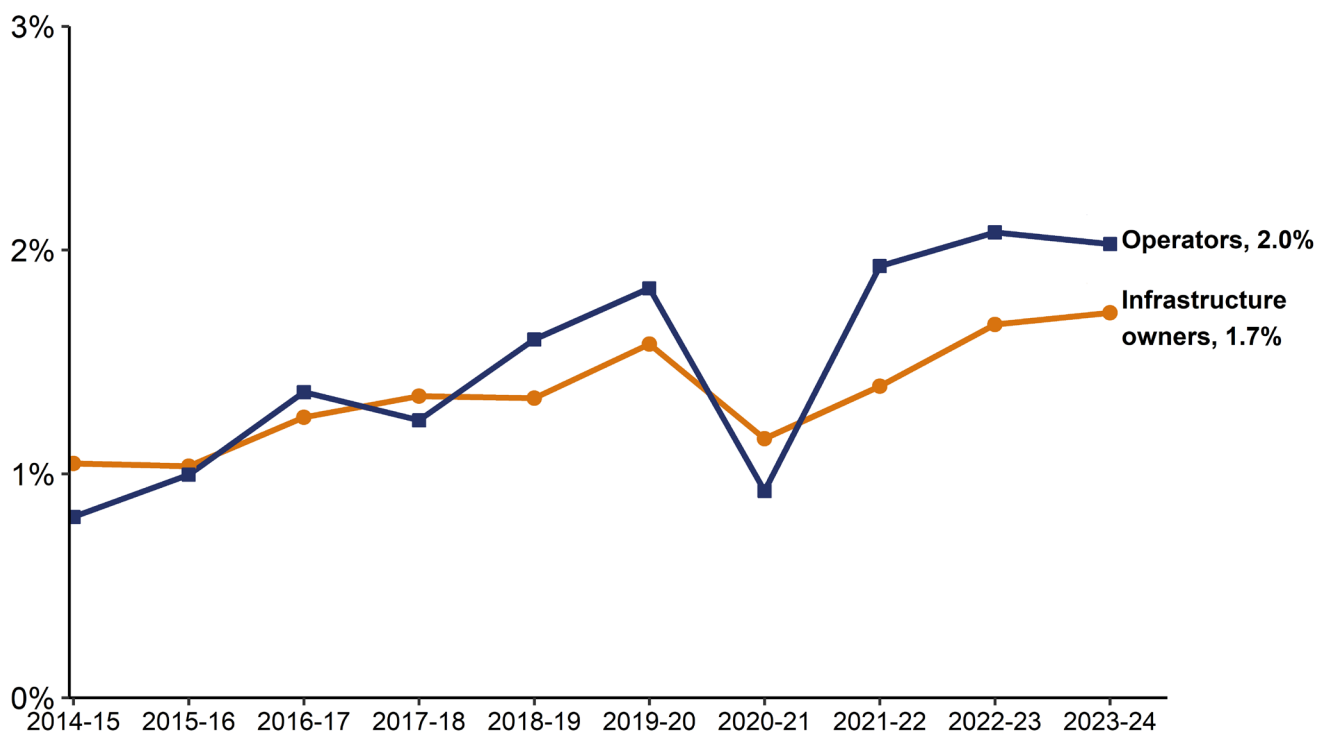


Figure 3.4 The share of cancellations attributed to infrastructure owners has increased slightly in the latest year

Cancellations scores by attributed responsibility, Great Britain, annual data, April 2014 to March 2024 (Table 3123)



In the **latest year** (1 April 2023 to 31 March 2024), of the Cancellations score of 3.8% recorded for Great Britain, 2.0% was attributed to operators while the remaining 1.7% was attributed to infrastructure owners. These do not sum to the Great Britain figure due to rounding. Compared with the previous year ending March 2023, this represents a slight increase in the percentage attributable to infrastructure owners and a slight decrease in the percentage attributable to operators. A higher percentage of cancellations have been attributable to operators in most years in the time series.

Train cancellations Table 3123 (quarterly) and Table 3124 (periodic) include data on the number of full and part cancellations by operator. Periodic (4-weekly) operational data in Table 3124 are made available on the ORR data portal as soon as the data are loaded and validated into our systems. At the date of this release’s publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

Severe disruption

A **Severely disrupted day** at a national (GB) level occurs when the Cancellations score is 5% or more. Nationally, there were five severely disrupted days in the latest quarter, three less than the same quarter the previous year.

Table 3.1 Severely disrupted days within January to March 2024 with daily Cancellation scores and major incidents or issues that contributed to the cancellations that day

Date	Cancellations score	Major incidents and issues contributing to cancellations
2 January 2024	19.3%	Disruption from Storm Henk, worst impacts seen in the South East
4 January 2024	6.0%	Continuing impacts of Storm Henk and a fatality at Reading
21 January 2024	8.8%	Disruption from Storm Isha, worst impacts seen in Scotland
22 January 2024	7.2%	Train issue at Paddington impacting Elizabeth line services
26 February 2024	8.8%	Overhead line failures, with the most significant involving a tree on the line at Maidenhead

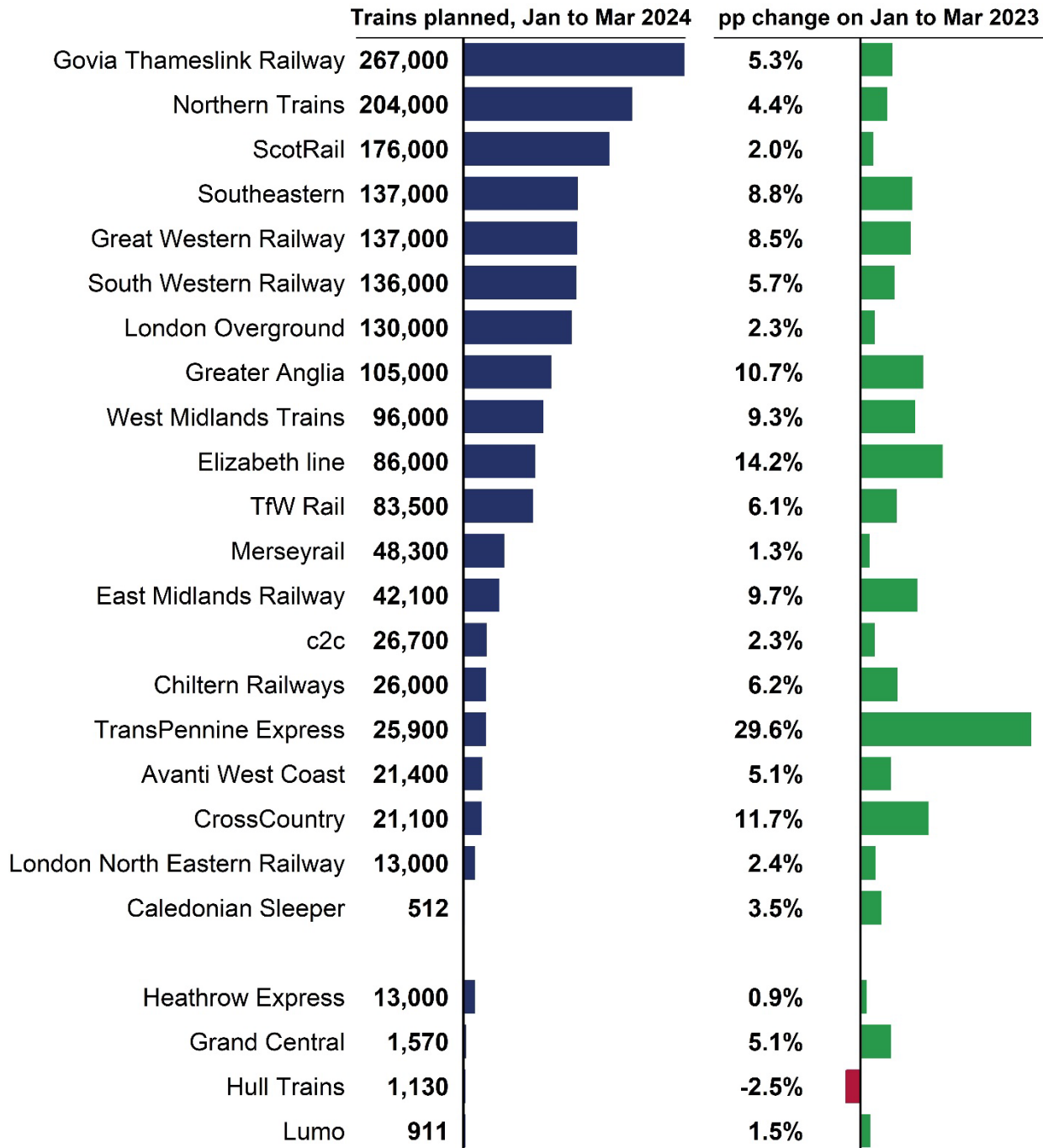
Periodic (four-weekly) data on severe disruption at a national and sub-operator level can be found in Table 3157.

4. Train operator analysis

Trains planned

Figure 4.1 Trains planned increased for all but one operator in the latest quarter

Trains planned by operator, January to March 2024, and percentage change compared with January to March 2023 (Table 3123)

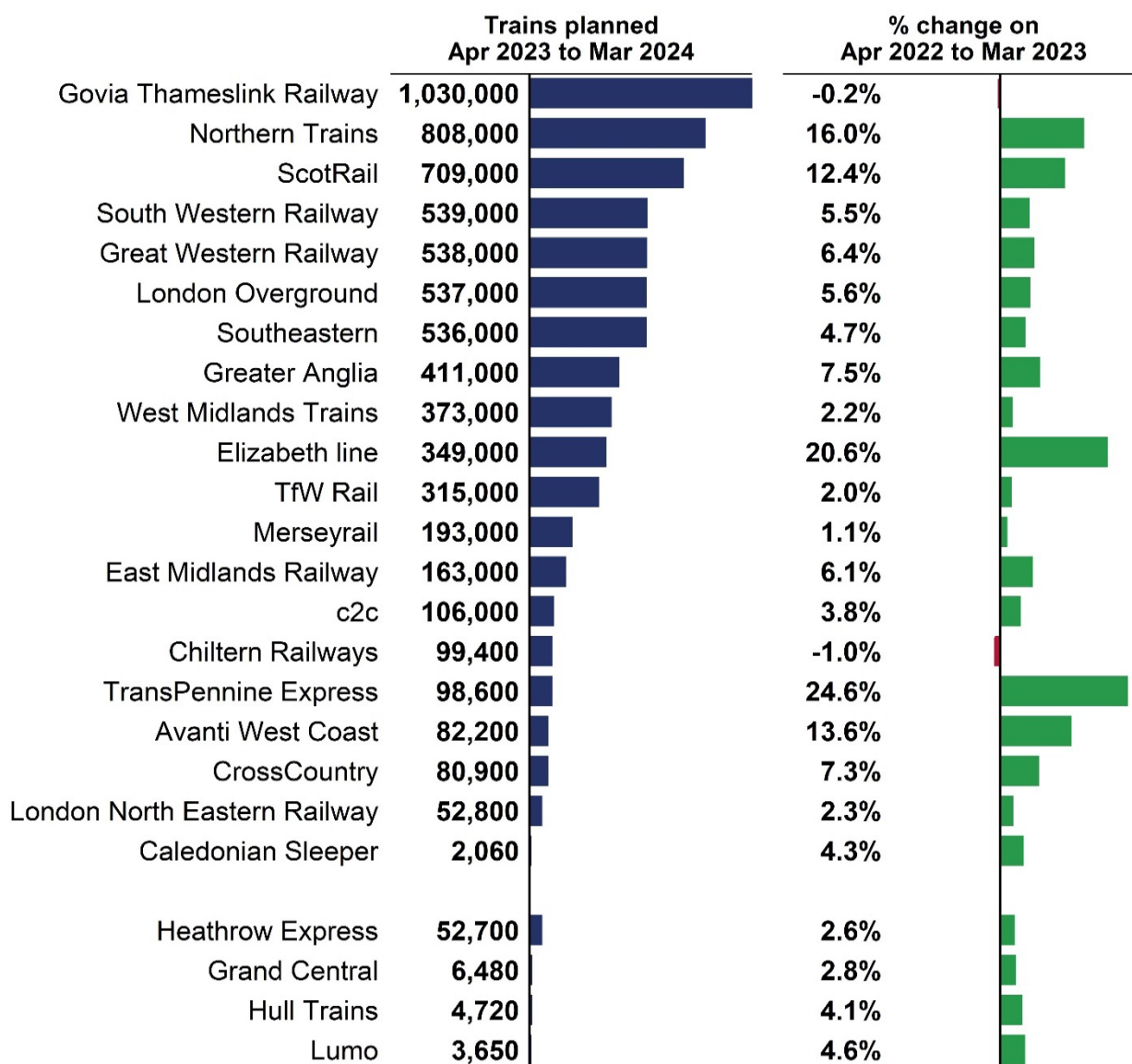


In the **latest quarter** (1 January to 31 March 2024), almost all operators had an increase in the number of trains planned compared with the same quarter the previous year. Only Hull Train had a decrease (down 2.5%). The widespread increases in trains planned on the same quarter the previous year reflect a reduction in the level of strike action and changes to timetables.

Increases varied by operator and this should be considered when reviewing the punctuality and reliability data and charts in the sections below.

Figure 4.2 Trains planned increased for all but two operators in the latest year

Trains planned by operator, April 2023 to March 2024, and percentage change compared with April 2022 to March 2023 (Table 3123)



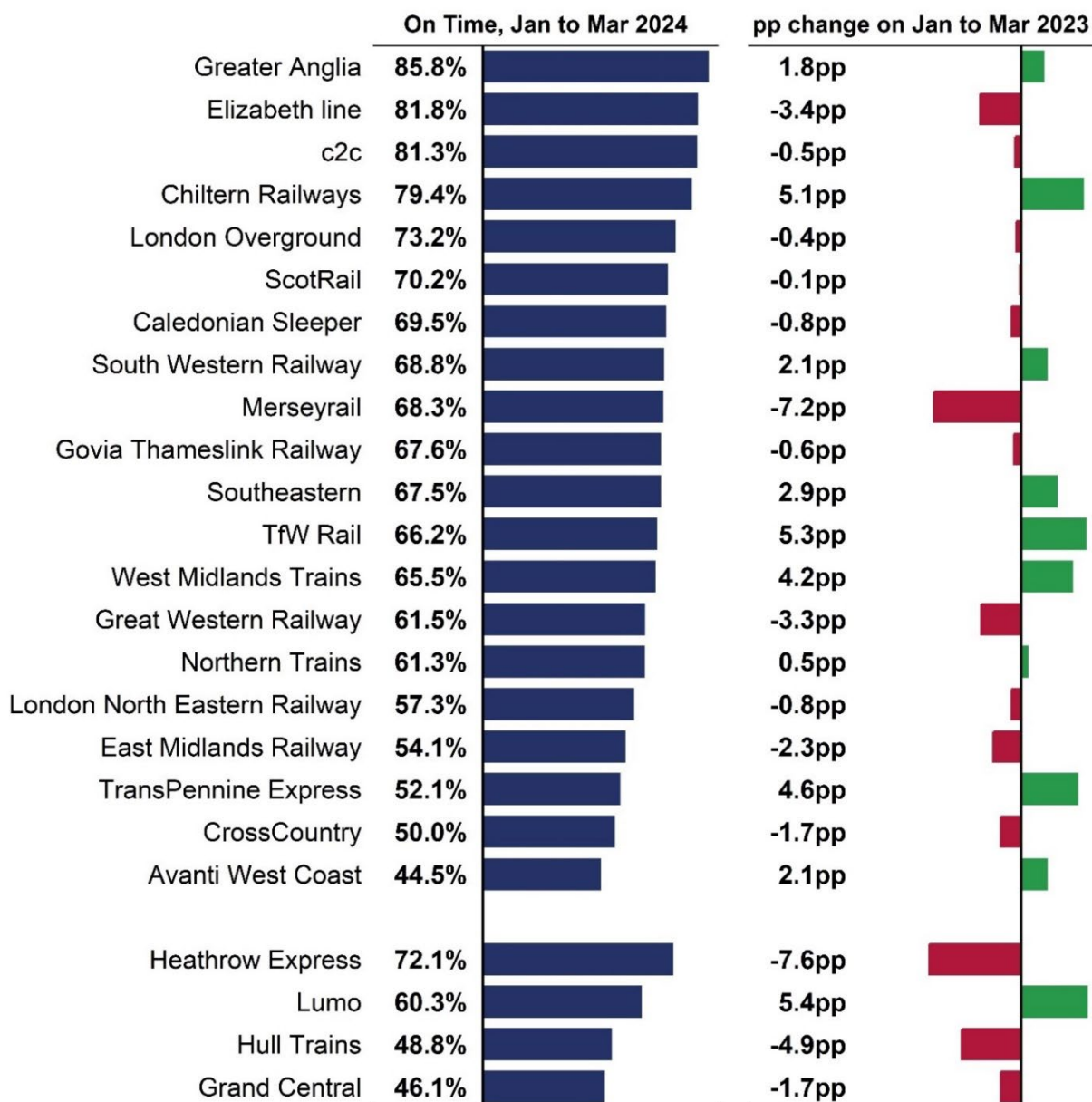
In the **latest year** (1 April 2023 to 31 March 2024), Govia Thameslink Railway planned the most trains (1.03 million) and Caledonian Sleeper planned the fewest trains (2,060). TransPennine Express recorded the highest percentage increase in trains planned compared with the previous year (up 24.6%), while Chiltern Railways had the largest decrease in trains planned (down 1%).

Periodic (4-weekly) operational data in Table 3124 are made available on the ORR data portal as soon as the data are loaded and validated into our systems. At the date of this release's publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

Punctuality

Figure 4.3 Punctuality was worse for 14 out of 24 operators in the latest quarter

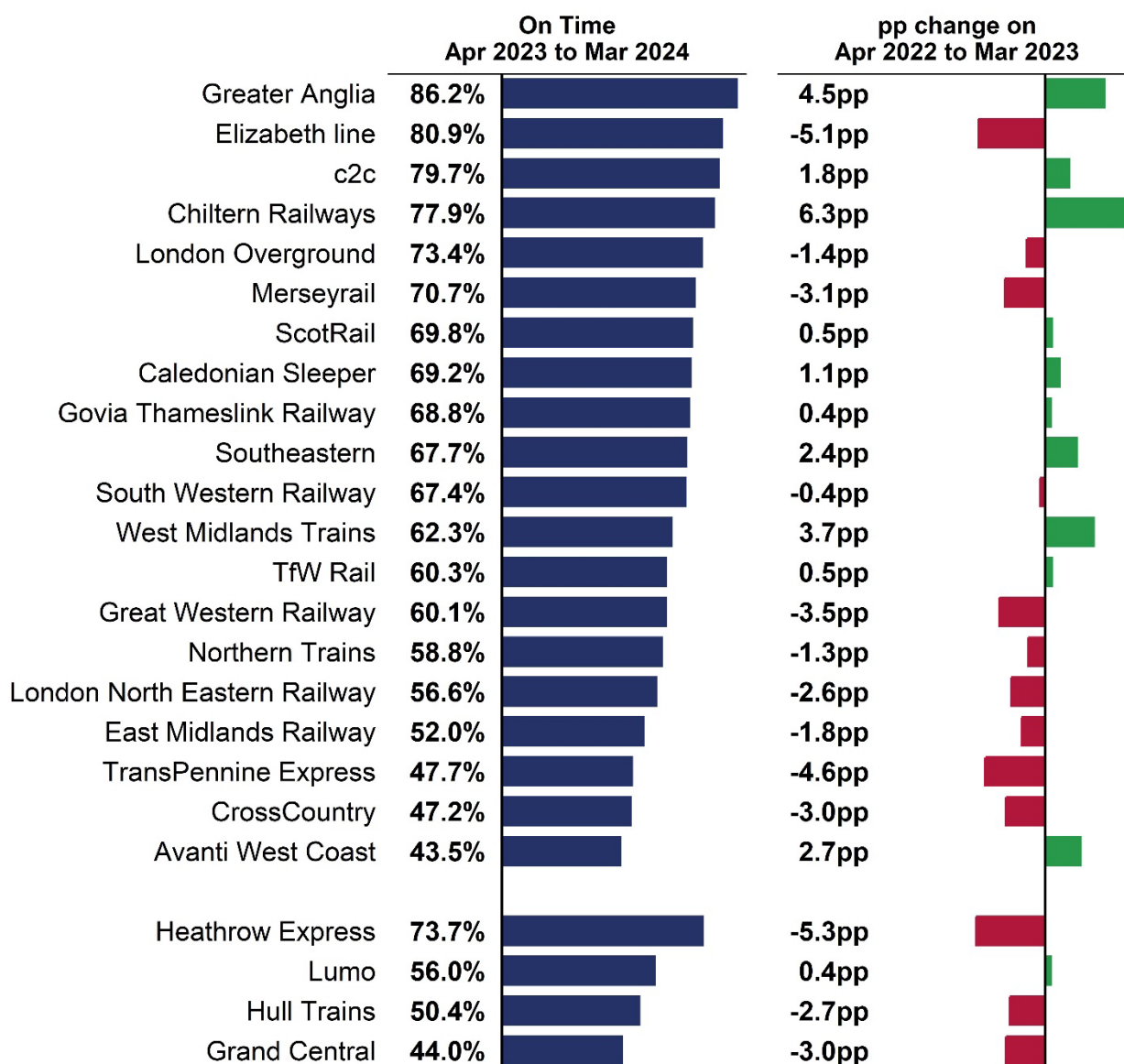
On Time by operator, January to March 2024 and percentage point (pp) change compared with January to March 2023 (Table 3133)



In the **latest quarter** (1 January to 31 March 2024), Lumo recorded the highest increase in On Time percentage compared with the same quarter the previous year (up 5.4pp), while Heathrow Express recorded the greatest decrease (down 7.6pp).

Figure 4.4 Punctuality decreased for just over half of operators in the latest year

On Time by operator, April 2023 to March 2024 and percentage point (pp) change compared with April 2022 to March 2023 (Table 3133)



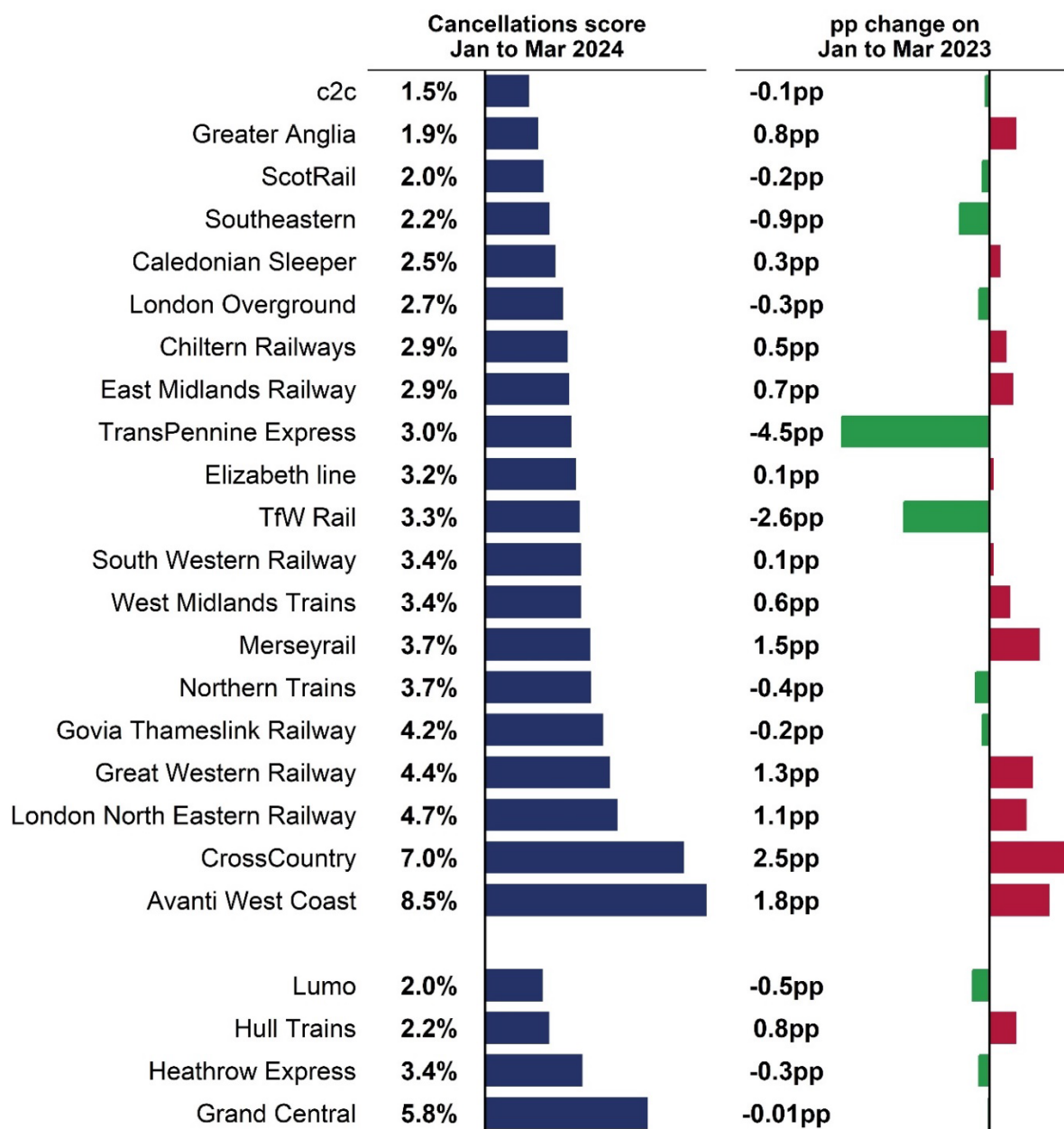
In the **latest year** (1 April 2023 to 31 March 2024), Chiltern Railways recorded the highest increase in On Time percentage on the previous year (up 6.3pp) while Heathrow Express recorded the largest decrease (down 5.3pp). The majority of operators recorded an On Time percentage of 60% or greater.

Periodic (4-weekly) operational data in Table 3138 are made available on the ORR data portal as soon as the data are loaded and validated into our systems. At the date of this release's publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

Reliability

Figure 4.5 Just over half of operators saw an increase in their Cancellations score in the latest quarter

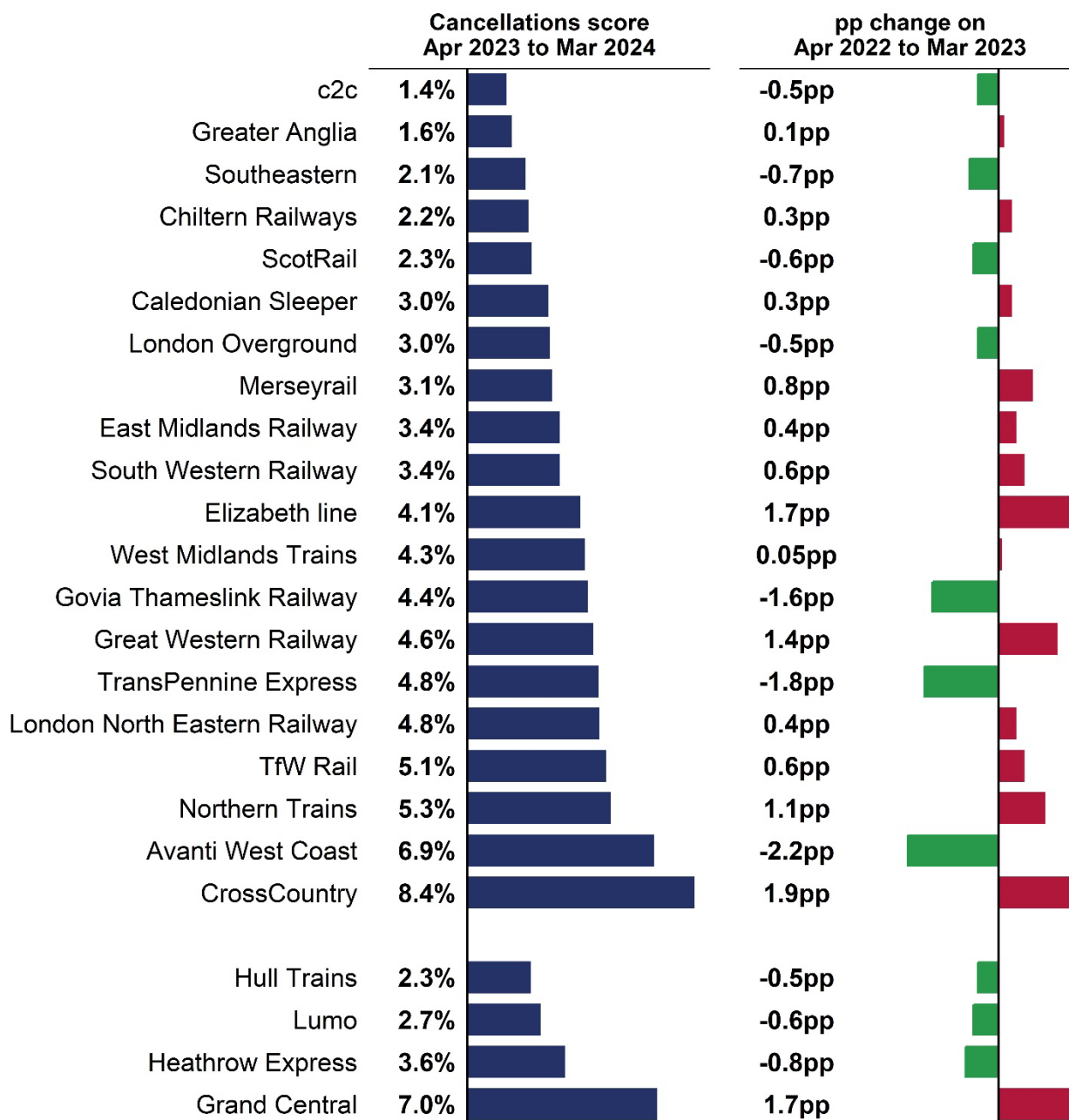
Cancellations score by operator, January to March 2024 and percentage point (pp) change compared with January to March 2023 (Table 3123)



In the **latest quarter** (1 January to 31 March 2024), reliability improved for eleven operators, with lower Cancellations scores than the same quarter the previous year. Of these, TransPennine Express saw the greatest improvement (down 4.5pp to 3.0%). CrossCountry saw the greatest deterioration (up 2.5pp to 7.0%).

Figure 4.6 Reliability worsened for most operators in the latest year

Cancellations score by operator, April 2023 to March 2024 and percentage point (pp) change compared with April 2022 to March 2023 (Table 3123)



In the **latest year** (1 April 2023 to 31 March 2024), c2c recorded the lowest Cancellations score (1.4%), while CrossCountry recorded the highest (8.4%). Avanti West Coast saw the greatest improvement (down 2.2pp to 6.9%), while CrossCountry saw the greatest deterioration (up 1.9pp to 8.4%).

Periodic (4-weekly) operational data in Table 3124 are made available on the ORR data portal as soon as the data are loaded and validated into our systems. At the date of this release's publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

P*-coded pre-cancellations

Some operators have reported they use the practice of “P*-coding” for resource availability shortage pre-cancellations. Pre-cancelled trains are removed from the timetable before it is finalised at 22:00 the previous evening and therefore may not be appearing in operators’ Cancellations scores. Operators who use “P*-coding” may therefore have a lower Cancellations score reported in this release than that which a passenger may experience. From the start of 2023 ORR has collected and published the number of trains that each operator removed from the timetable due to resource availability shortages every rail period.

These data are published with an ‘adjusted Cancellations score’ to include the trains removed from the timetable due to resource availability shortages. The ‘adjusted Cancellations score’ was calculated by combining the official Cancellations score data with the resource availability shortage pre-cancellations data. More information about how the adjusted Cancellations scores are calculated and the limitations of the measure can be found in the Passenger rail performance: cancellations data factsheet on the [ORR data portal](#).

Based on the data we collected, the adjusted Cancellations score for the latest quarter was 3.6% (Figure 4.7). This was 0.3pp higher than the official Cancellations score. In the latest quarter, fourteen operators reported the use of “P*- coding” for resource availability shortage pre-cancellations, and of these, London North Eastern Railway was the operator with the biggest gap between their official and adjusted scores with a 3.2pp difference.

In the **latest year** (1 April 2023 to 31 March 2024) the adjusted Cancellations score was 4.2% (Figure 4.8). Five operators reported no “P*-coded” pre-cancellations during the year. They were: c2c, CrossCountry, Elizabeth line, Greater Anglia and Southeastern.

Of the 19 operators that reported “P*-coded” pre-cancellations in some or all periods during the year, TransPennine Express had the largest difference between their official (4.8%) and adjusted (10.8%) Cancellations scores. This was driven by large numbers of pre-cancellations due shortage of available traincrew between April and December 2023. Grand Central was the operator with the second largest difference between its official (7.0%) and adjusted (12.4%) Cancellations scores, with the main cause of their pre-cancellations being a shortage of available rolling stock.

Figure 4.7 Fourteen operators reported the use of “P*- coded” pre-cancellations in the latest quarter

Official Cancellations score and “P*- coded” adjusted Cancellations score, Great Britain and by operator, January to March 2024 (Table 3128 – periodic data)

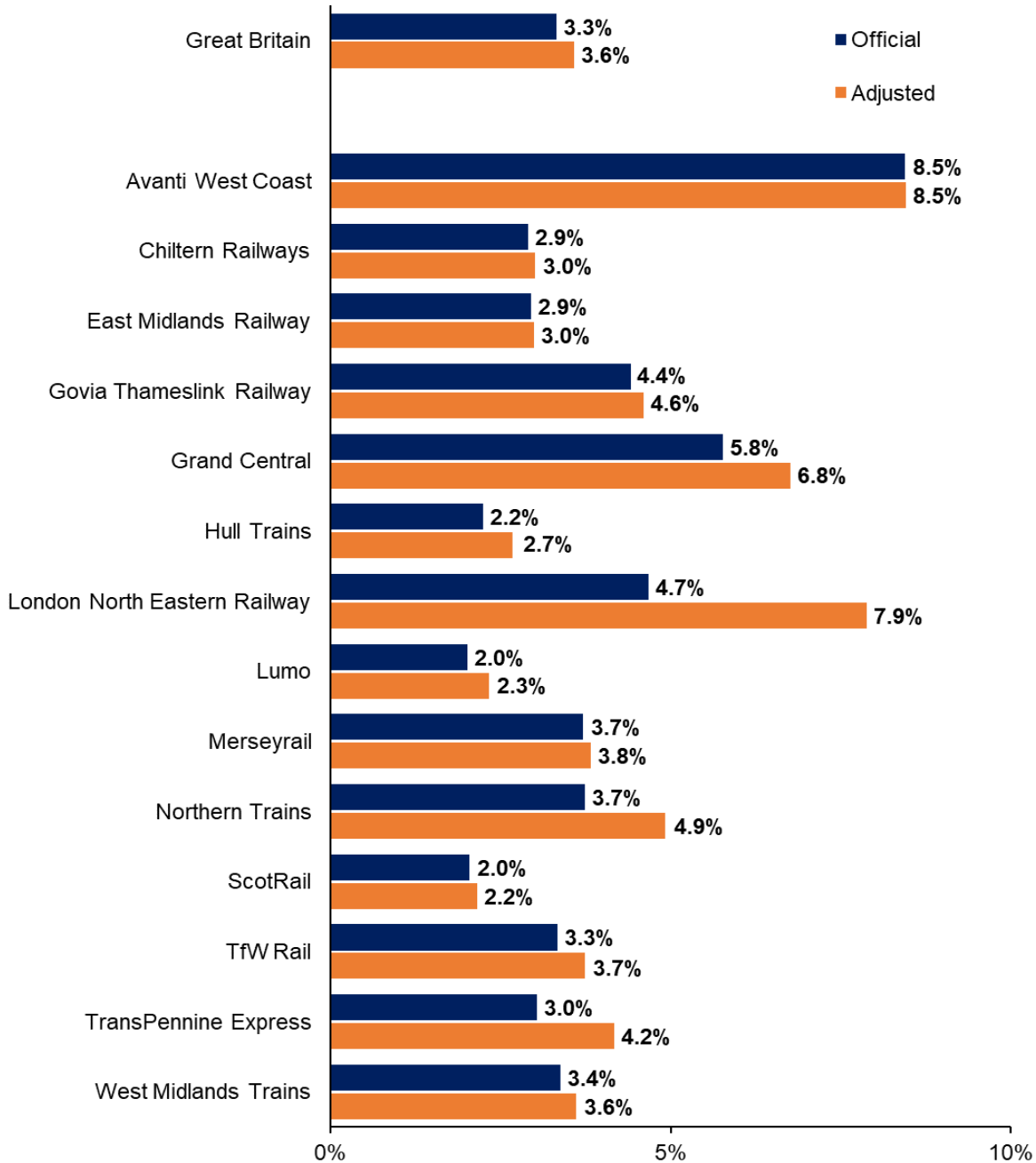
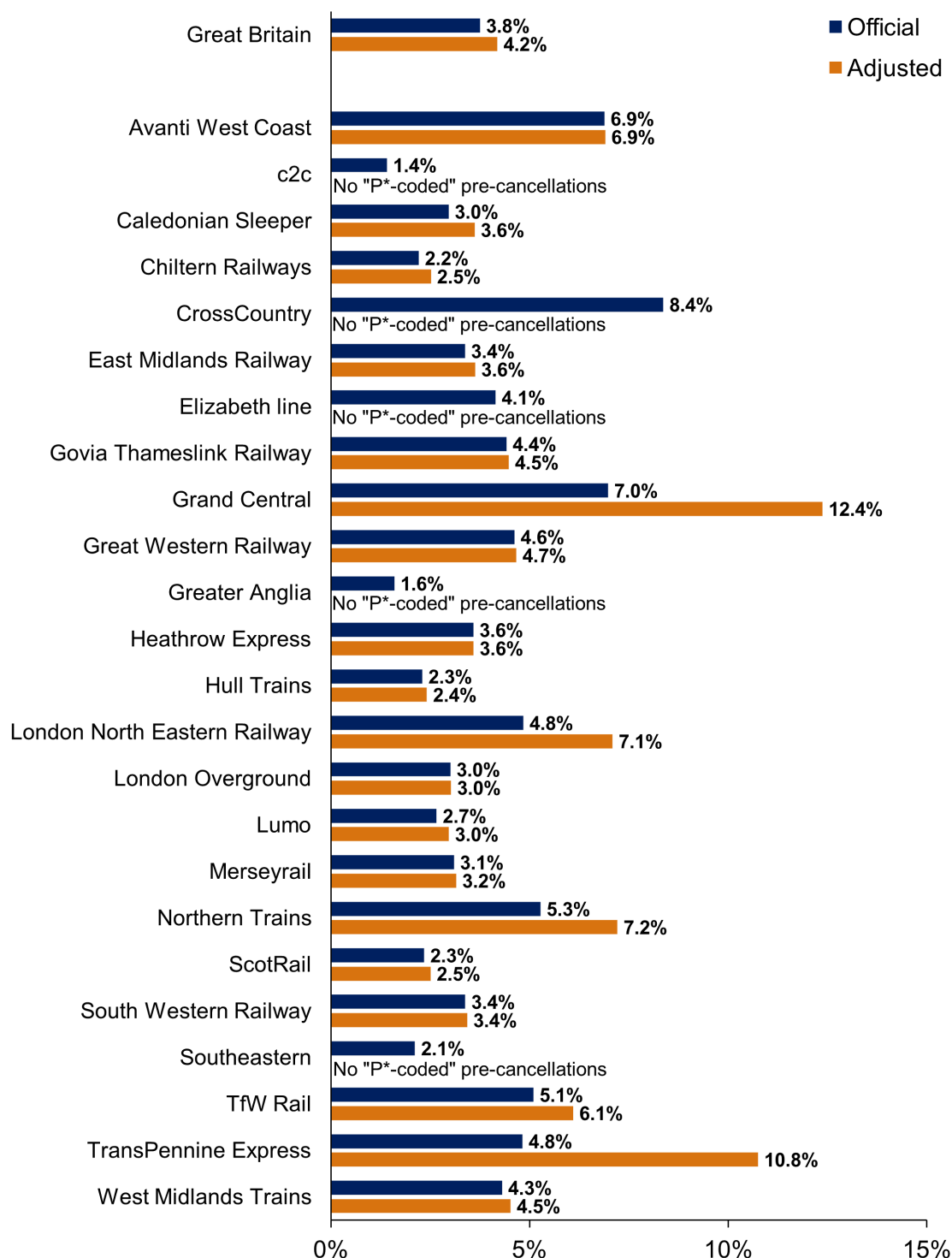


Figure 4.8 Nineteen operators reported pre-cancellations in the latest year
 Official and adjusted Cancellations score by operator, annual data, April 2023 to March 2024 (Table 3128)



More information and data about resource availability shortage “P*- coded” pre-cancellations can be found in the Passenger rail performance: cancellations data factsheet and Table 3128 on the [ORR data portal](#). At the date of this release’s publication (30 May 2024), the latest periodic data available is up to 27 April 2024.

5. Annexes

Annex 1 – Definitions

- **On Time** measures the percentage of recorded station stops arrived at early or less than one minute after the scheduled time (as per timetable). Early trains are classified as 'on time'. *A higher On Time score indicates better punctuality.*
- **Time to 3 and Time to 15** measure the percentage of recorded station stops arrived at early or less than three and 15 minutes respectively after the scheduled time. The percentages are cumulative.
- **A recorded station stop** is defined as a location with both a planned timetable time and an actual recorded time where a train has stopped. Up to around 90% of all station stops are currently recorded. No estimates have been made for punctuality at the c.10% of station stops not recorded.
- The **moving annual average (MAA)** reflects the proportion of trains On Time (or cancelled if referring to cancellations measure) in the past 12 months.
- **Public Performance Measure (PPM)** is the proportion of trains arriving at their final destination early or less than five minutes after the scheduled time for London and South East, Regional and Scotland operators, or less than ten minutes for Long Distance operators. For three of the open access operators (Hull Trains, Grand Central and Lumo), it is less than ten minutes, while Heathrow Express services it is less than five minutes. Where a train fails to stop at one or more booked calling points on the journey, the train is considered to have failed PPM. *A higher score indicates better punctuality.*
- **Delay minutes** are defined as the time lost between consecutive timing points on the rail network. Delay incidents producing three or more minutes of delay on Britain's railways are attributed to either Network Rail or a train operator. As well as infrastructure and operational delays such as signal failures and overrunning engineering works, delays caused by external factors such as severe weather, vandalism, cable theft and trespass are also attributed to Network Rail. This is because they are considered best placed to mitigate for such incidents.
- **Consistent Region Measure – (Passenger) Performance (CRM-P)** is defined as the delay attributed to Network Rail from incidents occurring in each Network Rail Region, per 100 train kilometres. *A lower score reflects better performance.*

- **Average Passenger Lateness (APL)** measures the average lateness of a passenger as they alight from their train. It is estimated for each train by multiplying the number of passengers expected to alight at main stations by the punctuality to the nearest minute at those stops. The measure also takes into account passenger lateness resulting from cancelled trains.
- **Cancellations score** measures the amount of trains that are cancelled as a percentage of trains planned. This would include trains missing stations and/or not reaching their destination. The cancellations measure is a score which weights full cancellations as one and part cancellations as half. This industry measure is an indicator of disruption against the timetable operating on the day. The timetable is finalised at 22:00 the previous evening, and trains removed from the timetable before then will not be included. *A lower cancellations score indicates better reliability.*
- **P*-coded pre-cancellations** are trains removed from the timetable before it is finalised at 22:00 the previous evening. The data ORR collects and publishes is for resource availability shortage pre-cancellations only.
- **Responsibility for cancellations:** A delay attribution process is used to apportion responsibility for cancellations and any one cancellation can be split between multiple causes of delay. **External incidents** are attributed to the party considered best placed to mitigate their effects.
- A **severely disrupted day** at a national (GB) level is defined when the cancellations score is 5% or more. At a sub-operator level, a severely disrupted day is defined when the cancellations score for any sub-operator is 20% or more.

Further information on each of these measures and other definitions can be found in the quality and methodology report on the [Passenger rail performance page](#) of the data portal.

Annex 2 – Quality and methodology

Data source

Most of the data contained within this statistical release are collected automatically from Network Rail's TRUST System (Train Running System on TOPs (Total Operation Processing System)). The latest data should be treated as provisional, as train operators provide Network Rail with information e.g. on cancellations, which can be updated over time. These updates are only provided at operator level. As such, aggregations of sub-operator data can provide slightly different figures to those published at the operator level.

These measures are judged against what is known as the plan of the day. The train operator and Network Rail confirm this at 22:00 on the previous evening. Trains removed from the railway systems before this time are excluded from the measures presented in this statistical release and associated data tables.

Network Rail provides data to ORR within 21 days of the end of each of the 13 railway reporting periods (each period lasts four weeks). Where possible, Network Rail remaps historical data to match the railway franchises that exist today. The quarterly data in this release are derived by splitting the periodic data according to the number of days of the period that falls within each quarter.

Punctuality and reliability by operator

The data provided in Table 3133 (Train punctuality at recorded station stops) and Table 3123 (Train cancellations) show the railway as it exists today. Historical data are shown for the existing operators as far back as data are available. For some operators, data are available quarterly as far back as April 1997. While comparisons can be made with historical data, it should be noted that the service provided by many operators has changed substantially.

As an example, during the year April 1997 to March 1998 Virgin Trains West Coast (VTWC) planned to run 55,600 trains. During the year April 2012 to March 2013 this figure had almost doubled to reach 110,400. In December 2013, however, the operator reconfigured their timetable to extend Scotland to Birmingham services to London in place of some Birmingham to London services. A change in service composition such as this would have had an effect on the overall level of performance of the operator.

Trains planned, PPM and CaSL performance of the operators that existed at the time is available in Table 3103.

Sub-operator level data

Train punctuality and reliability performance data by sub-operator can be found in Table 3167 (Disaggregated train punctuality and reliability performance on the rail network).

In some cases, individual operators are broken down into different sub-operators under different brand names e.g. Govia Thameslink Railway operates as Gatwick Express, Great Northern, Southern, and Thameslink.

Four operators provide services in more than one sector: East Midlands Trains, Great Western Railway, Greater Anglia, and West Midlands Trains. Each of these operators is broken down into different sub-operators corresponding to each sectoral component.

Recent changes to train operators

On 24 May 2022, the Elizabeth line opened to passengers. Also, on this date the services running under TfL Rail were rebranded as the Elizabeth line.

On 28 May 2023, TransPennine Express was moved to public ownership under the Department for Transport Operator of Last Resort (OLR).

On 25 June 2023, Caledonian Sleeper was moved to public ownership under the Scottish Government.

Further information on individual operators, including route maps, can be found via the [Rail Delivery Group website](#).

Revisions

Revisions have been made within Table 3174 on our data portal.

Details of previous revisions can be found in the [Revisions log](#).

How these statistics can be used



- Monitoring the punctuality and reliability performance of passenger rail services in Great Britain
- Supporting high level understanding of why performance has changed on the rail network
- Comparing rail performance by passenger operator (noting that performance across the rail network will have different challenges e.g. busier sections)
- Monitoring performance over time, broadly based on the railway as it exists today

How these statistics cannot be used



- Monitoring passenger rail usage (refer to [Passenger rail usage statistics](#))
- Monitoring freight rail performance (refer to [Freight rail usage and performance statistics](#))
- Monitoring the impact of franchise changes on performance (historical data is generally presented based on the railway as it exists today)

Annex 3 – List of data tables associated with this release and other related statistics

Data tables

All data tables can be accessed on the [data portal](#) free of charge in OpenDocument Spreadsheet (.ods) format. We can also provide data in csv format on request.

All tables associated with this release can be found under the Data tables heading at the bottom of the [Passenger rail performance page](#).

Train punctuality

- Train punctuality at recorded station stops by operator – Table 3133
- Train punctuality at recorded station stops by operator (periodic) – Table 3138
- On time at recorded station stops by Network Rail region (periodic) – Table 3131 (NEW TABLE)
- On time at recorded station stops by Network Rail route (periodic) – Table 3132 (NEW TABLE)
- Public Performance Measure by operator and sector – Table 3113
- Public Performance Measure by operator and sector (periodic) – Table 3114

Train reliability

- Trains planned and cancellations by operator and cause – Table 3123
- Trains planned and cancellations by operator and cause (periodic) – Table 3124
- Passenger cancellations by Network Rail region (periodic) – Table 3121 (NEW TABLE)
- Passenger cancellations by Network Rail route (periodic) – Table 3122 (NEW TABLE)
- Days of severe disruption by sub-operator (periodic) – Table 3157
- Cancelled and Significantly Late by operator and sector (periodic) – Table 3194
- Pre-cancellations and adjusted cancellations score by operator (periodic) – Table 3128

Other tables

- Disaggregated train punctuality and reliability performance by sub-operator (periodic) – Table 3167
- Average passenger lateness by operator and sector (periodic) – Table 3144
- Delay minutes by operator and cause (periodic) – Table 3184
- Historic passenger trains planned, PPM, and CaSL - quarterly by operator – Table 3103
- Consistent Region Measure (Passenger) Performance by Region (periodic) – Table 3174

- Delay minutes per 1,000 train miles by Network Rail region (periodic) – Table 3181 (NEW TABLE)
- Delay minutes per 1,000 train miles by Network Rail route (periodic) – Table 3182 (NEW TABLE)

Other related statistics

[P-coded cancellations](#) data is published on the data portal.

Freight rail performance data tables are published on the [Freight rail usage and performance page](#) on the data portal.

ORR publishes [quarterly passenger rail usage statistics](#). Statistics covering the latest quarter (1 January to 31 March 2024) will be published on 13 June 2024.

The Department for Transport (DfT) publishes [rail statistics](#). For example, Rail passenger numbers and overcrowding on weekdays in major cities.

DfT has also published statistics on the estimated reduction in services during the strike action, for each train operator, as part of a consultation on [implementing minimum service levels for passenger rail](#).

European comparisons

Due to differences in how passenger rail performance is measured in other countries, opportunities to make direct comparisons with statistics in this release are limited. Data from other European countries is published in the [IRG-Rail Eleventh Annual Market Monitoring Report](#).

Annex 4 – ORR’s statistical publications

Our statistical practice is regulated by the Office for Statistics Regulation (OSR). OSR sets the standards of trustworthiness, quality and value in the [Code of Practice for Statistics](#) that all producers of official statistics should adhere to. You are welcome to contact us directly with any comments about how we meet these standards by emailing rail.stats@orr.gov.uk. Alternatively, you can contact OSR by emailing regulation@statistics.gov.uk or via the OSR website.

Statistical Releases

This publication is part of ORR’s [‘accredited official statistics’](#), which consist of seven annual publications: **Estimates of station usage; Rail industry finance (UK); Rail fares index; Rail safety statistics; Rail infrastructure and assets; Rail emissions; Regional rail usage**; and four quarterly publications: **Passenger rail performance; Freight rail usage and performance; Passenger rail usage; Passenger rail service complaints**.

ORR also publishes a number of other official statistics, which consist of five annual publications: **Common Safety Indicators; Passenger satisfaction with complaints handling; Train operating company key statistics; Occupational health; Rail statistics compendium**; and four quarterly publications: **Signals passed at danger (SPADs); Delay compensation claims; Disabled Persons Railcards (DPRC); Passenger assistance**.

All the above publications are available on the [data portal](#) along with a list of [publication dates](#) for the next 12 months.

Accredited official statistics

Accredited official statistics are called National Statistics in the Statistics and Registration Service Act 2007. They are official statistics that have been independently reviewed by the Office for Statistics Regulation and found to comply with the standards of trustworthiness, quality and value in the Code of Practice for Statistics.

The majority of our [statistical releases were independently reviewed by the OSR in June 2012](#). They comply with the standards of trustworthiness, quality and value in the [Code of Practice for Statistics](#) and are labelled accredited official statistics.

Since our review we have improved the content, presentation and quality of our statistical releases. In addition, in July 2019 we launched our new data portal. Therefore, in late 2019 we worked with the OSR to conduct a compliance check to ensure we are still meeting the standards of the Code. On 4 November 2019, [OSR published a letter](#) confirming that ORR’s statistics should continue to be accredited official statistics.

OSR found many positive aspects in the way that we produce and present our statistics and welcomed the range of improvements made since the statistics were last assessed.

Estimates of station usage statistics were [independently reviewed by OSR](#) in November 2020 and [their accreditation was confirmed](#) on 1 December 2020.

For more information on how we adhere to the Code please see our [compliance statements](#).

If you have any feedback or questions, please email rail.stats@orr.gov.uk.



© Crown copyright 2024

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at dataportal.orr.gov.uk

Any enquiries regarding this publication should be sent to us at orr.gov.uk/contact-us

